

of each digit of the multi-digit number as well as the number as a whole is cyclically repeated;
 visual display means connected to receive said signals as provided by said second means and to display at least some of the digits of the keyed-in multi-digit number to obtain progressive display thereof as the digits of the multi-digit number are entered by the keyboard means;
 circuit means connected to the second integrated circuit means and receiving therefrom the signals on the repetitive basis and providing frequency reduction of presentation of the signals so as to obtain dial signals; and
 automatic dial-out means connected to the circuit means to receive said dial signals and to providing relatively low rate dial signals.

3. A telephone subscriber facility, including telephone circuitry and handset, further including a keyboard, that includes digit keys arranged in a matrix having rows and columns;
 a first integrated circuit means having sense lines and interrogation lines respectively coupled to the rows and columns of the matrix and having corresponding intersections governed by the keys, and providing cyclically repeated interrogation signals in the interrogating lines to interrogate whether any key in any row has been actuated, the first integrated circuit means including first internal means for sequentially scanning the sense lines and second internal means connected to receive an interrogating signal through a sense line when the key on an intersection of an interrogation line and the sense line has been activated as an interrogation pulse is set into the interrogation line and the sense line is being scanned;
 second integrated circuit means connected to the first integrated circuit means to assemble a representation of sequential digit entries by operation of the keyboard;
 third integrated circuit means connected to the first and second circuit means responsive to actuation of first particular keys of the board other than dial digit keys to provide arithmetic operation on digits entered by actuation of digit keys as used for telephone number dial-in;
 display means provided for display of multi-digit numbers and connected to the second and third integrated circuit means to display multi-digits numbers as they are entered by operation of the digit keys as well as the result of digital operations in response to operation of one of the particular keys; and
 additional circuitry connected to be responsive to a second particular key of the board other than digit keys to cause dial-out of and in response to a number held in the second circuit means.

4. A telephone subscriber facility, including telephone circuitry and handset, further including a keyboard that includes digit keys arranged in a matrix having rows and columns;
 integrated circuit means having sense lines and interrogation lines leading out of the integrated circuit chip, the lines arranged corresponding to said matrix, whereby a key respectively interconnects one of said sense lines and one of said interrogation lines, the integrated circuit means including first

circuit means to provide interrogation signals sequentially to said interrogation lines, and second circuit means for sequentially monitoring the sense lines while an interrogation signal is sustained on one of the interrogation lines, the first and second circuit means including a counter, the integrated circuit means including third circuit means to ascertain the state of the counter when an interrogation signal passes through a monitored sense line;
 second integrated circuit means connected to the first integrated circuit means for assembling digital signals in response to sequential counter states ascertained pursuant to sequential operation of digit keys of the board, the second integrated circuit means including circuit means to provide control signals of digital significance in response to said digital signals;
 display means connected to the second integrated circuit means for providing display of multi-digit numbers in response to said control signals to display digits as they are entered by operation of the digit keys; and
 additional circuitry also connected to the second integrated circuit means and responsive to a particular key of the keyboard other than digit keys, to cause dial-out of and in response to a number held in the second integrated circuit means and displayed by the display means.

5. A telephone subscriber facility including telephone circuitry and handset, further including a keyboard which includes digit keys; circuit means connected to the keyboard and including first, second and third integrated circuit means;

said first integrated circuit means being connected directly to the keyboard for receiving and storing keyed-in digits and assembling sequentially keyed-in digits as multi-digit numbers;

said second integrated circuit means connected to the first integrated circuit means for arithmetically processing signals as received from the first integrated circuit means and returning the processed signals to the first integrated circuit means, the second integrated circuit means presenting processed or unprocessed digital signals;

said third integrated circuit means connected to the second integrated circuit means and responsive to the presented signals and providing display control signals in response thereto; additional circuitry connected to said circuit means to be additionally responsive to operation of the digit keys for providing dial control signals representative of keyed in digits to obtain dial out of said keyed in digits

visual display means connected to be responsive to the display control signals to display the presented signals; including signals representing keyed in and dialed out digits; and

control keys included in the keyboard and connected to the integrated circuit means for obtaining said arithmetic processing.

6. A facility as in claim 5 said additional circuitry including the third integrated circuit means to provide dialing of the number as represented by the presented signals, the keyboard including a control key for enabling the additional circuitry.

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